

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended)

A cane comprising:

a first member having a first inside diameter, a first end, and a second end;

a second member having a ground engaging end, an upper end, and an intermediate section between the ground engaging end and the upper end, the upper end having a second inside diameter, the upper end and a portion of the intermediate section slideably connected to the first member;

a ball screw having an top end and a bottom end, and a ball nut threaded onto the ball screw, the bottom end of the ball screw inserted into the second member and the ball nut attached to the second member;

power means for rotating the ball screw, ~~the power means operably attached to the ball screw~~ wherein the ball screw is attached to the power means by a planetary gear train comprising a first planetary gear assembly and a second planetary gear assembly; and means for activating the power means.

2. (Original)

The cane of claim 1 wherein a motor housing is attached to the first end.

3. (Original)

The cane of claim 2 wherein the power means is contained within the motor housing.

4. (Original)

The cane of claim 3 further comprising a handle member attached to the motor housing.

5. (Original)

The cane of claim 1 wherein the ball nut is enclosed within a housing, the housing having an outer surface.

6. (Original)

The cane of claim 5 wherein the housing comprises a thermoplastic material.

7. (Original)

The cane of claim 5 wherein the outer surface engages the second inside diameter by a friction fit.

- 1 8. (Original)
2 The cane of claim 1 wherein the ball screw comprises a first stop pin extending from the
3 surface of the ball screw adjacent to the top end and a second stop pin extending from the
4 surface of the ball screw adjacent to the bottom end.
- 5 9. (Original)
6 The cane of claim 8 wherein the ball nut freewheels upon engaging either the first stop
7 pin or the second stop pin.
- 8 10. (Original)
9 The cane of claim 1 wherein the power means comprises an electric motor.
- 10 11. (Original)
11 The cane of claim 10 further comprising a current source for operating the electric motor.
- 12 12. (Original)
13 The cane of claim 11 wherein the current source comprises a battery.
- 14 13. (Original)
15 The cane of claim 12 wherein the battery is rechargeable.
- 16 14. (Original)
17 The cane of claim 11 wherein the means for activating the power means comprises a
18 switch electrically connected to the current source, the switch having at least three
19 positions.
- 20 15. (Original)
21 The cane of claim 14 wherein when the switch is in the first position the ball screw
22 rotates in a clockwise direction.
- 23 16. (Original)
24 The cane of claim 14 wherein when the switch is in the second position the ball screw
25 rotates in a counter-clockwise direction.
- 26 17. (Original)
27 The cane of claim 14 wherein when the switch is in the third position, current flow to the
power means is stopped.
18. (Canceled)
19. (Canceled)

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- 1 20. (Currently Amended)
2 A cane comprising:
3 a first member having a first inside diameter, a first end, and a second end;
4 a second member having a ground engaging end, an upper end, and an intermediate
5 section between the ground engaging end and the upper end, the upper end having a
6 second inside diameter, the upper end and a portion of the intermediate section slideably
7 inserted within the second end of the first member;
8 a ball screw having an top end and a bottom end, and a ball nut threaded onto the ball
9 screw, the bottom end of the ball screw inserted into the second member and the ball nut
10 attached to the second member;
11 power means for rotating the ball screw, the rotation causing the ball nut to traverse a
12 portion of a length of the ball screw, ~~the power means operably attached to the ball screw~~
13 wherein the ball screw is attached to the power means by a planetary gear train
14 comprising a first planetary gear assembly and a second planetary gear assembly; and
15 means for activating the power means.
- 16 21. (Original)
17 The cane of claim 20 wherein a motor housing is attached to the first end.
- 18 22. (Original)
19 The cane of claim 20 wherein the power means is contained within the motor housing.
- 20 23. (Original)
21 The cane of claim 20 wherein the ball nut is enclosed within a housing, the housing
22 having an outer surface.
- 23 24. (Original)
24 The cane of claim 23 wherein the housing comprises a thermoplastic material.
- 25 25. (Original)
26 The cane of claim 23 wherein the outer surface engages the second inside diameter by a
friction fit.
- 27 26. (Original)
The cane of claim 20 wherein the ball screw comprises a first stop pin extending from the
surface of the ball screw adjacent to the top end and a second stop pin extending from the
surface of the ball screw adjacent to the bottom end.

- 1 27. (Original)
2 The cane of claim 26 wherein the ball nut freewheels upon engaging either the first stop
3 pin or the second stop pin.
- 4 28. (Original)
5 The cane of claim 20 wherein the power means comprises an electric motor.
- 6 29. (Original)
7 The cane of claim 28 further comprising a current source for operating the electric motor.
- 8 30. (Original)
9 The cane of claim 29 wherein the current source comprises a battery.
- 10 31. (Original)
11 The cane of claim 30 wherein the battery is rechargeable.
- 12 32. (Original)
13 The cane of claim 21 further comprising a handle member attached to the motor housing.
- 14 33. (Original)
15 The cane of claim 32 wherein a battery is enclosed within the handle member.
- 16 34. (Original)
17 The cane of claim 33 wherein the battery is rechargeable.
- 18 35. (Original)
19 The cane of claim 34 wherein the handle member further comprises a port for connecting
20 a recharging unit.
- 21 36. (Original)
22 The cane of claim 29 wherein the means for activating the power means comprises a
23 switch electrically connected to the current source, the switch having at least three
24 positions.
- 25 37. (Original)
26 The cane of claim 36 wherein when the switch is in the first position the ball screw
27 rotates in a clockwise direction.
- 28 38. (Original)
29 The cane of claim 36 wherein when the switch is in the second position the ball screw
30 rotates in a counter-clockwise direction.

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- 1 39. (Original)
2 The cane of claim 36 wherein when the switch is in the third position, current flow to the
3 power means is stopped.
- 4 40. (Canceled)
- 5 41. (Canceled)
- 6 42. (Currently Amended)
7 A cane comprising:
8 a first member having a first end, a second end, and a first inside diameter;
9 a second member having a ground engaging end, an upper end, and an intermediate
10 section between the ground engaging end and the upper end, the upper end having a
11 second inside diameter, the upper end and a portion of the intermediate section slideably
12 inserted within the second end of the first member, the cane having a variable length
13 defined by the distance between the first end and the ground engaging end;
14 a ball screw comprising a top end, a bottom end, and a ball nut threaded onto the ball
15 screw, the ball screw substantially contained within the second member and the ball nut
16 attached within the second inside diameter;
17 an electric motor operably attached to the ball gear with a planetary gear train comprising
18 a first planetary gear assembly and a second planetary gear assembly;
19 a battery connected to the electric motor; and
20 means for activating the electric motor, wherein the ball nut travels longitudinally along
21 the ball screw when the electric motor is activated, the length of the cane increasing as the
22 ball nut travels toward the bottom end of the ball screw and the length of the cane
23 decreasing as the ball nut travels towards the top end of the ball screw.
- 24 43. (Original)
25 The cane of claim 42 further comprising a motor housing attached to the first end.
- 26 44. (Original)
27 The cane of claim 43 wherein the electric motor is contained within the motor housing.
45. (Canceled)
46. (Original)
The cane of claim 42 wherein the ball nut is enclosed within a housing, the housing
having an outer surface.

- 1 47. (Original)
The cane of claim 46 wherein the housing comprises a thermoplastic material.
- 2 48. (Original)
3 The cane of claim 46 wherein the outer surface engages the second inside diameter by a
4 friction fit.
- 5 49. (Original)
6 The cane of claim 42 further comprising a first stop pin extending from the surface of the
7 ball screw adjacent to the top end and a second stop pin extending from the ball screw
adjacent to the bottom end.
- 8 50. (Original)
9 The cane of claim 49 wherein the ball nut freewheels upon engaging either the first stop
10 pin or the second stop pin.
- 11 51. (Original)
12 The cane of claim 42 wherein the battery is rechargeable.
- 13 52. (Original)
14 The cane of claim 43 further comprising a handle member attached to the motor housing.
- 15 53. (Original)
16 The cane of claim 52 wherein the battery is enclosed within the handle member.
- 17 54. (Original)
18 The cane of claim 42 wherein the ball screw comprises a spline gear attached to the top
19 end.
- 20 55. (Original)
21 The cane of claim 54 wherein the spline gear is supported within the first member by a
22 first bearing means.
- 23 56. (Original)
24 The cane of claim 42 wherein the bottom end of the ball screw is supported within the
25 second member by a second bearing means.
- 26 57. (Original)
The cane of claim 56, wherein the second bearing means comprises a clutch bearing.
- 27 58. (Original)
The cane of claim 57, wherein the clutch bearing is encased within a bearing housing.

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59. (Original)

The cane of claim 58, wherein the bearing housing comprises a thermoplastic material.